Listing of the Claims

1. (Previously presented) A dual mode file system in a subscriber network television system, comprising:

a digital home communication terminal (DHCT) comprising:

a memory with logic; and

a processor configured with the logic to determine whether a local file system is coupled to the DHCT, the processor further configured with the logic to, responsive to determining that the local file system is not coupled to the DHCT, use remote data from a virtual file system to support the processor, the processor further configured with the logic to, responsive to determining that the local file system is coupled to the DHCT, use local data stored in the local file system and the remote data from the virtual file system to support the processor.

2. (Canceled)

3. (Original) The dual mode file system of claim 1, wherein the remote data and the local data includes media content.

4. (Original) The dual mode file system of claim 1, wherein the local data is located in a local file system and the remote data is located in a virtual file system.

5. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to detect when the local file system is connected.

6. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to detect when the local file system is disconnected.

7. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to detect when the local file system is operable.

8. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to detect when the local file system is inoperable.

9. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to provide feedback to a user when the local file system is available.

10. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to transition from supporting the processor with data from the combination of the virtual file system and the local file system to supporting the processor with data from the virtual file system when the logic detects that the local file system is unavailable.

11. (Original) The dual mode file system of claim 4, wherein the logic is configured to support the processor with data from the virtual file system by receiving the data into the memory and causing playback of the data from the memory to a screen display.

12. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to substantially simultaneously transfer data to the local file system while receiving additional data from the virtual file system to the memory.

13. (Original) The dual mode file system of claim 4, wherein the logic is configured to support the processor with data from the local file system by receiving the data into the memory, wherein the logic is further configured to cause playback from the memory to a screen display.

14. (Original) The dual mode file system of claim 4, wherein the logic is configured to support the processor with data from the local file system by streaming the data from the local file system to a display device.

15. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to receive data through an out-of band channel.

16. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to store in the local file system data associated with a future media content instance, wherein said data is received into the local file system in advance of the presentation of said future media content instance.

17. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to receive data from the virtual file system to the local file system while substantially simultaneously uploading data from the local file system.

18. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to perform multiple read operations and multiple write operations in parallel to access a plurality of data in the local file system.

19. (Original) The dual mode file system of claim 18, wherein the multiple read operations and the multiple write operations occur substantially concurrently within substantially the same window of time.

20. (Original) The dual mode file system of claim 18, wherein the multiple read operations and the multiple write operations share slices of a window of time as if occurring substantially in parallel.

21. (Original) The dual mode file system of claim 4, wherein the local file system comprises a storage device with media, wherein the media is partitioned into a data portion with a data format for storing data and low memory consumption media content and a media content portion with a media content format for storing media content.

22. (Original) The dual mode file system of claim 21, wherein the processor is further configured with the logic to receive the media content into the data portion unless the media content consumes a threshold memory capacity that results in the processor receiving the media content with at least the threshold memory capacity into the media content portion.

23. (Original) The dual mode file system of claim 21, wherein the media is partitioned into a third media content portion for streaming media content for presentation to a user.

24. (Original) The dual mode file system of claim 21, wherein the media partitions are user configurable.

25. (Original) The dual mode file system of claim 4, further comprising two tuners for receiving data among a plurality of transmission channels, further comprising an out of band channel for receiving and sending data, further comprising a communication port.

26. (Original) The dual mode file system of claim 25, wherein the plurality of the transmission channels includes at least one digital transmission channel and at least one analog transmission channel.

27. (Original) The dual mode file system of claim 25, wherein the processor is further configured with the logic to request a plurality of data simultaneously from the plurality of the transmission channels.

28. (Original) The dual mode file system of claim 25, wherein the memory and the local file system store application data, application executable programs, and data associated with applications, and data associated with media services.

29. (Original) The dual mode file system of claim 25, wherein the processor is further configured with the logic to perform a multiplicity of write operations to the local file system substantially in parallel to store data and application clients from a subscriber television network, from the processor, and from a local device connected to the communication port.

30. (Original) The dual mode file system of claim 25, wherein the processor is further configured with the logic to perform a multiplicity of read operations from the local file system in parallel to retrieve data and application clients previously stored in the local file system to transmit the respective data and application clients to a local device connected to the communication port, to the memory for use by an application client or operating system executing in the processor, and to be transmitted to a destination in the subscriber network.

31. (Original) The dual mode file system of claim 25, wherein the processor is further configured with the logic to perform a multiplicity of read operations from the local file system in parallel to retrieve data and application clients previously stored in the local file system to transmit the respective data and application programs to a local device connected to the communication port, to the memory for use by an application or operating system executing in the processor, and to be transmitted to a destination outside of the subscriber network.

32. (Original) The dual mode file system of claim 25, wherein the processor is further configured with the logic to substantially simultaneously permanently record a media content instance received from one transmission channel and temporarily store a media content instance received from another transmission channel.

33. (Original) The dual mode file system of claim 25, wherein the processor is further configured with the logic to permanently record two media content instances substantially simultaneously from two different transmission channels.

34. (Original) The dual mode file system of claim 25, wherein the processor is further configured with the logic to substantially simultaneously display three media content instances, wherein the two media content instances are received from the transmission channels and the third media content instance is received from the local file system.

35. (Original) The dual mode file system of claim 25, wherein the media content instances from the transmission channels are received in real-time.

36. (Original) The dual mode file system of claim 4, further comprising an application client, wherein the processor is further configured with the logic to use the memory and the local file system for storing application client data in data structures with time-sensitive data entries maintained by an application client daemon task.

37. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to receive the application client data from an in-band tuner.

38. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to receive the application client data from a plurality of in-band tuners.

39. (Original) The dual mode file system of claim 36, wherein the application client is an electronic programming guide with electronic programming guide information, wherein the electronic programming guide information includes a list of media content instances for a standard amount of days, a list of media content instances for an extended amount of days, channels for the media content instances, standard description information for the media content instances, long description information for the media content instances, and media content instance preview audio and video clips.

40. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to receive the electronic programming guide information entirely into the memory, wherein the processor is further configured with the logic to access the electronic programming guide information for presentation in a display device.

41. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to receive the electronic programming guide information entirely into the local file system, wherein processor is further configured with the logic to access the electronic programming guide information for presentation in a display device.

42. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to receive the list of media content instances for an extended amount of days and the corresponding standard description information into the local file system.

43. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to receive the list of media content instances for an extended amount of days and the corresponding standard description information and long description information into the local file system.

44. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to receive the long description information into the local file system for the list of media content instances for the standard amount of days stored in the memory.

45. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to receive the media content instance preview audio and data clips associated with the media content instance in the list of media content instances for the standard amount of days and store said media content instance preview audio and data clips into the memory.

46. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to transfer said media content instance preview audio and data clips from the memory to the local file system, wherein the processor is further configured with the logic to access said media content instance preview audio and data clips from the local file system to the memory, wherein the processor is further configured with the logic to present said media content preview audio and data clips on a display device from the memory.

47. (Original) The dual mode file system of claim 36, wherein the processor is further configured with the logic to transfer said media content instance preview audio and data clips from the memory to the local file system, wherein the processor is further configured with the logic to access said media content instance preview audio and data clips from the local file system and present said media content instance preview audio and data clips on a display device from the local file system.

48. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to access sprites from the virtual file system and store in the local file system to augment the presentation of media content instances when retrieved from the local file system from an application client.

49. (Original) The dual mode file system of claim 4, wherein the processor is further configured with the logic to retrieve hyper-linked data corresponding to a media content instance before the presentation of said media content instance.

50. (Original) The dual mode file system of claim 49, wherein the application client is further configured to maintain hyper-linked data in entries in a hyper-linked data structure indexed by time and date and service.

51. (Original) The dual mode file system of claim 49, wherein the application client is further configured to maintain hyper-linked data in entries in a hyper-linked data structure indexed by time and date and channel.

52. (Original) The dual mode file system of claim 51, wherein the hyper-linked data entries are valid for a specific time, after which said hyper-linked data associated with an elapsed data entry is replaced with a replacement hyper-linked data that also is valid for a specific time,

53. (Original) The dual mode file system of claim 52, wherein the hyper-linked data structure provides a channel directory and subdirectories segregated into time blocks corresponding to the media content instance time period of presentation, wherein the time blocks include a current time block and an upcoming time block.

54. (Original) The dual mode file system of claim 53, wherein the current time block and upcoming time block are further segregated into time slots of increased granularity corresponding to the timed presentation of the hyper-linked data with a corresponding instance in a media content instance within said time blocks.

55. (Original) The dual mode file system of claim 54, wherein the hyper-linked data structure is updated continuously by the application client to maintain the hyper-linked data for current and upcoming media content instances.

56. (Original) The dual mode file system of claim 55, wherein the application client is further configured to update the hyper-linked data when the time and date has substantially elapsed.

57. (Original) The dual mode file system of claim 56, wherein the application client is further configured to use the local file system for caching hyper-linked data into the local file system from a virtual file system, wherein the hyper-linked data corresponds to data located in a designated time slot of a presentation of a media content instance, wherein the application is further configured to retrieve the hyper-linked data from the local file system and present it during its designated time slot during the presentation of the media content instance.

58. (Previously presented) A dual mode file method in a subscriber network television system comprising the steps of:

determining whether a local file system is coupled to a digital home communication terminal (DHCT);

responsive to determining that the local file system is not coupled to the DHCT, using remote data from a virtual file system to support a processor in the DHCT; and

responsive to determining that the local file system is coupled to the DHCT, using local data stored in the local file system and the remote data from the virtual file system to support the processor.

59. (Canceled)

60. (Previously presented) The method of claim 58, wherein the local data and the remote data includes media content.

61. (Previously presented) The method of claim 58, further comprising the step of transferring data from the remote file system to the local file system when the local file system is detected, then further comprising the step of receiving the data into a memory and causing the playback from the memory to a screen display.

62. (Previously presented) The method of claim 58, wherein the step of using the remote file system further comprises the step of receiving the data into a memory and causing playback from the memory to a screen display.

63. (Previously presented) The method of claim 58, wherein the step of using the local file system further comprises the step of streaming the data from the local file system to a display device.

64. (Previously presented) The method of claim 58, further comprising the step of partitioning the local file system into a data portion and a media content portion.

65. (Original) The method of claim 64, further comprising the step of receiving the media content into the data portion, unless the media content consumes a threshold memory capacity that causes it to be received into the media content portion.

66. (Original) The method of claim 64, further comprising the step of partitioning the local file system into a third partition.

67. (Previously presented) The method of claim 58, further comprising the step of receiving time sensitive data in the local file system and in a memory, further comprising the step of storing the time sensitive data in data structure entries indexed by time, further comprising the step of updating the data structure entries as the time indexes substantially elapse, further comprising the step of retrieving the time sensitive data from the local file system and causing the presentation of the time sensitive data in coordination with the presentation of a media content instance.

68. (Previously presented) The method of claim 58, further comprising the step of receiving sprites from the virtual file system and storing the sprites in the local file system, further comprising the step of retrieving the sprites from the local file system and causing the presentation of the sprites in coordination with the presentation of a media content instance.

69. (Previously presented) The method of claim 58, further comprising the steps of detecting when the local file system is connected.

70. (Previously presented) The method of claim 58, further comprising the step of detecting when the local file system is disconnected.

71. (Previously presented) The method of claim 58, further comprising the step of detecting when the local file system is operable.

72. (Previously presented) The method of claim 58, further comprising the step of detecting when the local file system is inoperable.

73. (Previously presented) The method of claim 58, further comprising the step of providing feedback to a user when the local file system is available.

74. (Previously presented) The method of claim 58, further comprising the step of transitioning from using the combination of the virtual file system and the local file system to using the virtual file system when the logic file system is unavailable.

75. (Previously presented) The method of claim 58, further comprising the step of substantially simultaneously transferring data to the local file system while receiving additional data from the virtual file system to the memory.

76. (Previously presented) The method of claim 58, further comprising the step of receiving the data through an out-of band channel.

77. (Previously presented) The method of claim 58, further comprising the step of storing in the local file system data associated with a future media content instance, wherein said data is received into the local file system in advance of the presentation of said future media content instance.

78. (Previously presented) The method of claim 58, further comprising the step of receiving data from the virtual file system to the local file system while substantially simultaneously uploading data from the local file system.

79. (Previously presented) The method of claim 58, further comprising the step of performing multiple read operations and multiple write operations in parallel to access a plurality of data in the local file system.

80. (Original) The method of claim 79, wherein the multiple read operations and the multiple write operations occur substantially concurrently within substantially the same window of time.

81. (Original) The method of claim 79, wherein the multiple read operations and the multiple write operations share slices of a window of time as if occurring substantially in parallel.

82. (Previously presented) The method of claim 58, further comprising the step of reading to and writing from user configurable media partitions in the local file system.

83. (Previously presented) The method of claim 58, further comprising the step of receiving the data among a plurality of transmission channels, wherein the transmission channels further comprise an out of band channel for receiving and sending data.

84. (Original) The method of claim 83, wherein the plurality of the transmission channels includes at least one digital transmission channel and at least one analog transmission channel.

85. (Original) The method of claim 83, further comprising the step of receiving a plurality of the data simultaneously from the plurality of the transmission channels.

86. (Original) The method of claim 83, further comprising the step of performing a multiplicity of write operations to the local file system substantially in parallel to storing the data and application clients from a subscriber television network, from a processor, and from a local device.

87. (Original) The method of claim 83, further comprising the step of performing a multiplicity of read operations from the local file system in parallel to retrieve the data and application clients previously stored in the local file system to transmit the respective data and application clients to a local device, to a memory for use by an application client or operating system executing in a processor, and to be transmitted to a destination outside of the subscriber network.

88. (Original) The method of claim 83, further comprising the step of substantially simultaneously permanently recording a media content instance received from one transmission channel and temporarily storing media content instance received from another transmission channel.

89. (Original) The method of claim 83, further comprising the step of permanently recording two media content instances substantially simultaneously from two different transmission channels.

90. (Original) The method of claim 83, further comprising the step of substantially simultaneously displaying three media content instances, wherein the two media content instances are received from the transmission channels and the third media content instance is received from the local file system.

91. (Original) The method of claim 83, further comprising the step of receiving the media content instances from the transmission channels in real-time.

92. (Previously presented) The method of claim 58, further comprising the step of storing application client data associated with application clients in data structures with time-sensitive data entries maintained by an application client daemon task.

93. (Original) The method of claim 92, further comprising the step of receiving the application client data from an in-band tuner.

94. (Original) The method of claim 92, further comprising the step of receiving the application client data from a plurality of in-band tuners.

95. (Original) The method of claim 92, wherein the application client is an electronic programming guide with electronic programming guide information, wherein the electronic programming guide information includes a list of media content instances for a standard amount of days, a list of media content instances for an extended amount of days, channels for the media content instances, standard description information for the media content instances, long description information for the media content instances, and media content instance preview audio and video clips.

96. (Original) The method of claim 95, further comprising the step of receiving the electronic programming guide information entirely into a memory, further comprising the step of accessing the electronic programming guide information for presentation in a display device.

97. (Original) The method of claim 95, further comprising the step of receiving the electronic programming guide information entirely into the local file system, further comprising the step of accessing the electronic programming guide information for presentation in a display device.

98. (Original) The method of claim 95, further comprising the step of receiving the long description information into the local file system for the list of media content instances for the standard amount of days stored in a memory.

99. (Previously presented) The method of claim 95, further comprising the step of receiving the media content instance preview audio and data clips associated with the media content instance in the list of the media content instances for the standard amount of days and storing said media content instance preview audio and data clips into a memory.

100. (Original) The method of claim 99, further comprising the step of transferring said media content instance preview audio and data clips from the memory to the local file system, further comprising the step of accessing said media content instance preview audio and data clips from the local file system to the memory, further comprising the step of presenting said media content instance preview audio and data clips on a display device from the memory.

101. (Original) The method of claim 99, further comprising the step of transferring said media content instance preview audio and data clips from the memory to the local file system, further comprising the step of accessing said media content instance preview audio and data clips from the local file system and presenting said media content instance preview audio and data clips on a display device from the local file system.

102. (Previously presented) The method of claim 58, further comprising the step of accessing sprites from the virtual file system and storing the sprites in the local file system to augment the presentation of media content instances when the sprites are retrieved from the local file system from an application client.

103. (Previously presented) The method of claim 58, further comprising the step of retrieving hyper-linked data corresponding to a media content instance before the presentation of the media content instance.

104. (Original) A media client device comprising:

a memory;

a plurality of tuners; and

a processor configured with the memory to transition from supporting playback of media content from a virtual file system to a combination of the virtual file system and a local file system depending on the availability of the local file system.

105. (Original) The device of claim 104, wherein the processor is further configured with the memory to substantially simultaneously receive, decode, and composite into a single display presentation the audio, video, graphical, and textual data of a first TV channel while substantially simultaneously storing in the local file system the audio, video, graphical, and textual data of the first TV channel.

106. (Original) The device of claim 104, wherein the processor is further configured with the memory to substantially simultaneously receive, decode, and composite into a single display presentation the audio, video, graphical, and textual data of a first TV channel while substantially simultaneously reading, decoding, and compositing into the same single display presentation the audio, video, graphical, and textual data of a second TV channel, previously stored in the local file system, on a real-time basis.

107. (Original) The device of claim 104, wherein the processor is further configured with the memory to substantially simultaneously receive, decode, and composite into a single display presentation the audio, video, graphical, and textual data of a first TV channel while substantially simultaneously reading, decoding, and compositing into the same single display presentation the audio, video, graphical, and textual data of a second TV channel, previously stored in the local file system, on a real-time basis, while substantially simultaneously reading media content and data corresponding to a third TV channel that was previously stored in the local file system and decoding and compositing into a single display presentation the audio, video, graphical, and textual data of the third TV channel.

108. (Original) The device of claim 104, wherein the processor is further configured with the memory to retrieve previously stored digital audio in the local file system, and playing back the audio to complement the first TV channel.

109. (Previously presented) A hyper-linked data caching system comprising:

a memory; and

a processor configured with the memory to cache hyper-linked data in a data structure indexed by time of presentation within a corresponding media content instance.

110. (Original) The caching system of claim 109, wherein the logic is further configured to retrieve hyper-linked data corresponding to a media content instance before the presentation of the media content instance.

111. (Original) The caching system of claim 110, wherein the application client is further configured to maintain hyper-linked data in entries in a hyper-linked data structure indexed by time and date and channel.

112. (Previously presented) The caching system of claim 111, wherein the hyper-linked data entries are valid for a specific time, after which said hyper-linked data associated with an elapsed data entry is replaced with a replacement hyper-linked data that also is valid for a specific time.

113. (Original) The caching system of claim 112, wherein the hyper-linked data structure provides a channel directory and subdirectories segregated into time blocks corresponding to the media content instance time period of presentation.

114. (Original) The caching system of claim 113, wherein the time blocks include a current time block and an upcoming time block.

115. (Original) The caching system of claim 114, wherein the current time block and upcoming time block are further segregated into time slots of increased granularity corresponding to the timed presentation of the hyper-linked media content with a corresponding instance in a media content instance within said time blocks.

116. (Original) The caching system of claim 115, wherein the hyper-linked data structure is updated continuously by the application client to maintain the hyper-linked media content for current and upcoming media content instances.

117. (Original) The caching system of claim 116, wherein the application client is further configured to update the hyper-linked data when the time and date has substantially elapsed.

118. (Original) The caching system of claim 117, wherein the application client is further configured to use the storage device for caching hyper-linked media content into the storage device from a remote device, wherein the hyper-linked media content corresponds to media content located in a designated time slot of a presentation of a media content instance, wherein the application is further configured to retrieve the hyper-linked media content from the storage device and present it during its designated time slot during the presentation of the media content instance.

119. (Original) The caching system of claim 109, wherein the hyper-linked data includes hyper-linked media content.

120. (Original) The caching system of claim 109, wherein the application client is further configured to maintain hyper-linked data in entries in a hyper-linked data structure indexed by time and date and service.

121. (Original) A hyper-linked data caching method comprising the steps of:

receiving hyper-linked data corresponding to a media content instance; and

maintaining the hyper-linked data in a data structure indexed by time of presentation within the corresponding media content instance.

122. (Original) The caching method of claim 121, further comprising the step of segregating the data structure into subdirectories corresponding to channel and time period blocks.

123. (Original) The caching method of claim 122, further comprising the step of continually updating the subdirectory entries as time progresses.

124. (Original) The caching method of claim 123, wherein the step of updating includes the step of replacing time-elapsed hyper-linked data with hyper-linked data for a not-yet presented media content instance.

125. (Original) The caching method of claim 124, further comprising the step of providing time of presentation slots for a current time block and an upcoming time block.

126. (Original) The caching method of claim 125, further comprising the step of maintaining hyper-linked data within each time of presentation slot corresponding to the presentation of the media content instance associated with said hyper-linked data.

127. (Original) The caching method of claim 121, wherein the hyper-linked data includes hyper-linked media content.

128. (Original) The caching method of claim 121, further comprising the step of segregating the data structure into subdirectories corresponding to service and time period blocks.